

Best Available Copy

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2001-178720

(43)Date of publication of application : 03.07.2001

(51)Int.Cl.

A61B 8/06

(21)Application number : 2000-357187

(71)Applicant : GE MEDICAL SYSTEMS GLOBAL  
TECHNOLOGY CO LLC

(22)Date of filing : 24.11.2000

(72)Inventor : TORP HANS GARMANN  
BJAERUM STEINAR

(30)Priority

Priority number : 1999 449389

Priority date : 26.11.1999

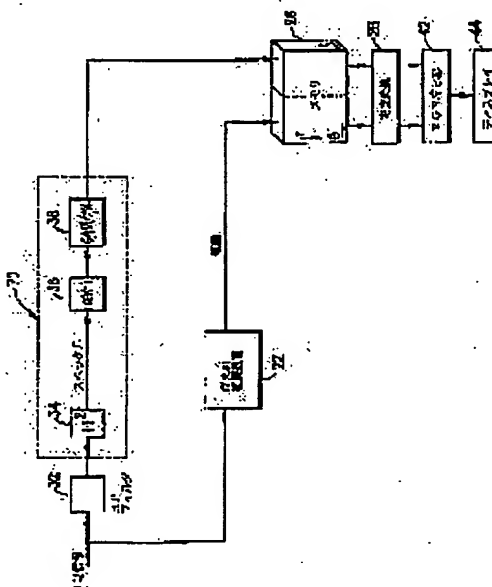
Priority country : US

(54) METHOD AND DEVICE FOR VISUALIZING MOVEMENT IN ULTRASONIC FLOW IMAGING  
USING SEQUENTIAL DATA ACQUISITION

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a method and a device for imaging blood movement by displaying an emphasized image of a fluctuating speckle pattern.

SOLUTION: A sequential stream of data frames wherein each the data frame is a result of one scan can be used for processing. Respective time sequences of signal samples at respective positions on a scanning face can be used for the processing. In the first step of the blood movement image processing, the signal is high-pass filtered (32). Following the high-pass filtering, e.g. by calculating a square amount (i.e. a power) of the high-pass filtered signal (I/Q or RF), a speckle signal is formed (34). Next, an amplitude of the formed speckle signal is nonlinearly converted (36) to form a blood movement imaging signal for display.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of  
rejection][Kind of final disposal of application other than  
the examiner's decision of rejection or  
application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]